

WATER PERMIT NO. 5825-3

Phone: 288-3312

Name of Applicant: Great Plains Swine LLC

Post Office Address: PO Box 1027, Rochester MN 55903

Amount of Water Claimed: 75 gpm (0.17 cfs) Total Acres:

Source of Water Supply: groundwater

Water to be used for: commercial County: Aurora

About 4 miles northwest of White Lake

PRIORITY Date Received: 5-17-94 Fee: \$150 Remarks:

Corrected Application Received: Period of Annual Use: Jan 1 - Dec 31

WATER QUALITY APPROVAL RECEIVED: APPROVED/CONDITIONAL (Circle one)

WI-1 Description same as Application YES NO REMARKS:

Diversion Point: SW 1/4 NW 1/4 Sec 31-T104N-R66W

Land to be Irrigated:

	⊗				
		3/			

Well Log: Driller: Licensed YES NO

Depth of Well: 950' REMARKS: well log no available yet

Type of Map: plat PREPARED BY: Keith F. Fletcher, P.E. Reviewed and the Number

Assigned on: 5-18-94 By: Karen Schlaak

FORM 2: Application for uses other than irrigation

(type or print)

Mail to:
Water Rights Division
Joe Foss Building
523 E Capitol
Pierre SD 57501-3181
605 773-3352

No. 5825-3 Hydrologic Unit 10140101
Basin Missouri River
Newspaper South Dakota Mail, Box 367, Plankinton
(office use only)



Application For Permit To Appropriate Water Within The State Of South Dakota

Check use of water:

☐ Municipal ☐ Suburban Housing ☐ Recreational ☐ Institutional
☐ Rural Water System ☒ Commercial ☐ Fish & Wildlife ☐ Geothermal Heat
☒ Domestic ☐ Industrial ☐ Other _____
(over 18 gpm)

Type of Application: ☒ New ☐ Vested Right (Use predates Mar 2, 1955) ☐ Future Use Reservation
(check one) ☐ Place to Beneficial Use Water Reserved by Future Use Permit No. _____
☐ Amendment/Correction to Permit No. _____

Description of amendment/correction: (i.e. change diversion point(s), add diversion point(s), change use, etc.) _____

- Name of Applicant GREAT PLAINS SWINE LLC Phone (507) 288-3312
Mailing Address PO BOX 1027 ROCHESTER State MN 55903
(Street, RR, or Box) (City) (Zip Code)
- Amount of water claimed 0.17 *CFS or 75 **GPM ***AF
(*Cubic Feet per Second) (**Gallons per Minute) (***Acre Feet - storage capacity of dam/dugout or annual use if applicable)
- Source of water supply DAKOTA AQUIFER
- Location of point of diversion (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W) WELL IN THE SW 1/4 OF THE NW 1/4 OF SECTION 31, T 104 N, R 66 W OF THE 5TH P.M.
- County AURORA
- County or counties where water will be used AURORA
- Annual period during which water is to be used JANUARY 1 TO DECEMBER 31
- Give a description of the project. When available include any preliminary engineering report or other reports or information that will help explain the project. (Attach sheet if more space is needed)

SEE ATTACHMENT

Attachments: Attach Form 2A if diversion is from a well or dugout, or if storage of water is proposed. Attach map and any other technical information. (see instructions)

STATE OF SOUTH DAKOTA)

County of DAKOTA

I, Jim McPeak, the applicant, certify that I have read this application, have examined the attached map and that the matters stated are true and that I intend, and am able to complete the necessary construction.

Signed Jim McPeakSubscribed and sworn to before me this 16 day of March 1994

Barbara G. Norman
Notary Public

Supplemental Information

(type or print in ink)



1. Well Information - Proposed Construction

- a) Drill Hole Diameter 7 7/8" MIN Depth 950 FT
- b) Casing Type STEEL Diameter 5 9/16" O.D. Thickness 1/4"
- c) Screen Type STAINLESS STEEL Diameter 3" Thickness 1/4"
- d) Gravel Pack Thickness 3.5" +/- Length of Gravel Pack 60 FT +/-
- e) Depth to Top of Water Bearing Material 880' +/-
- f) Depth to Water (ground surface to water level) 100' +/-
- g) Distance to nearest existing domestic well:
On applicants property 100' +/- On property owned by others MORE THAN 1/2 MILE

2. Dugout Information

- a) Surface Dimensions _____ Depth _____
- b) Depth to water (ground surface to water level) _____

3. Water Storage Dams

If the proposed water use system contains one or more storage dams, please furnish the information requested below for each dam. The locations of the dams need to be shown on the map submitted with the application.

- a) If a private engineering firm or government agency was involved in the design of this dam, please give their name and address:

b) Freeboard _____

c) Crest Width _____

Crest Length _____

d) Height _____

e) Primary Outlet Capacity _____

If pipe, diameter _____

f) Secondary Spillway Capacity _____

Spillway Width _____

g) X & Y Slope

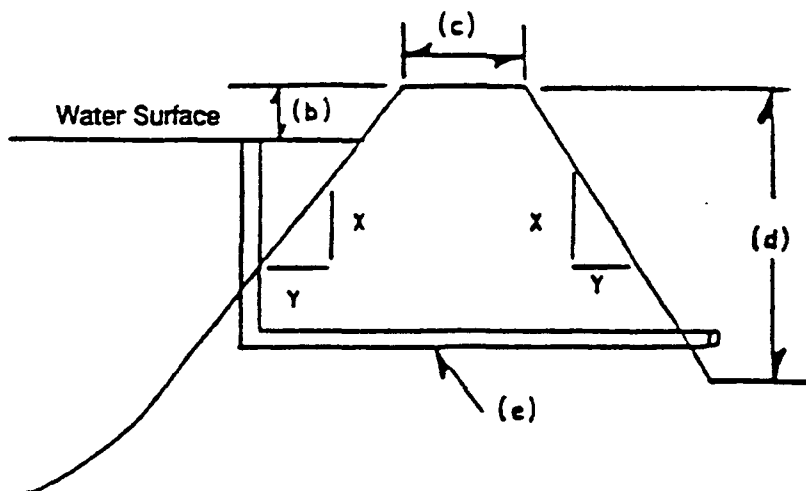
Upstream _____

Downstream _____

h) Surface Area of Impoundment _____

i) Storage _____ Acre Feet

j) Drainage Area above Dam _____ Acres



**SOUTH DAKOTA
WATER PERMIT NO. 5825-3**

Date of first receipt of application May 17, 1994.

The Water Management Board approved Water Permit Application No. 5825-3 on June 28, 1994 for Great Plains Swine LLC, PO Box 1027, Rochester MN 55903 authorizing the construction of the water use system and the placing of water to beneficial use subject to the following limitations, conditions and qualifications:

1. Water Permit No. 5825-3 to appropriate 75 gallons per minute (0.17 cubic feet of water per second) from one well (Dakota Formation) approximately 950 feet deep located in the SW 1/4 NW 1/4 Section 31-T104N-R66W.
2. The water appropriated shall be used for the purpose of supplying water for commercial use and may not exceed the amount of water needed for beneficial use in a swine production facility.
3. The water is to be used during the following described annual period: January 1 - December 31.
4. The date from which applicant may claim right is May 17, 1994.
5. One-fifth of the construction is to be completed on or before December 28, 1996.
6. All construction is to be completed on or before June 28, 1999.
7. Water is to be put to beneficial use on or before June 28, 2003.
8. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

QUALIFICATIONS

1. The well authorized by Permit No. 5825-3 shall be constructed by a licensed well driller and construction shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) from the producing formation to the surface pursuant to Section 74:02:04:28.
2. Operation of the disposal systems to dispose of waste and wastewater shall be in a manner that prevents runoff from the disposal sites and from entering the waters of the State. The diffused drainage of natural precipitation on agricultural lands resulting from a "non-point source" is not subject to these conditions.
3. The wastewater storage lagoon shall be designed so that it does not receive surface runoff from the surrounding area.
4. No wastewater may be released from the wastewater lagoon except through the disposal system, unless an extended period of above normal precipitation results in excess stored water and prevents operation of equipment to lower water levels due to field and weather conditions.

(continued)

5. Design, construction and management of the lagoons shall be sufficient to maintain a seepage rate of less than 1/16 of an inch per day. Compaction of the soils within the wastewater lagoon must be at least ninety-five percent of the Standard Procter Density (ASTM D6980-70).
6. The well approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
7. Approval of Permit No. 5825-3 is subject to compliance with the following then existing and applicable Water Management Board rules:
 - a. Chapter 74:03:15 Ground Water Quality Standards,
 - b. Chapter 74:03:16 Ground Water Discharge Permit,
 - c. Chapter 74:03:02 Surface Water Quality Standards,
 - d. Chapter 74:03:04 Uses Assigned to Streams, and
 - e. Chapters 74:03:17 through 74:03:26 Surface Water Discharge Provisions.

WATER MANAGEMENT BOARD

By: 
John Hatch, Chief Engineer
Water Rights Division
Department of Environment and Natural Resources

NOV 14 1994
date

ATTACHMENT TO FORM 2

This application is for a domestic well that will be drilled into the Dakota Aquifer. It will probably require a 7-1/2 HP pump at a setting of about 300 feet below land surface to enable it to produce the desired quantity of water, which is 45 to 55 GPM. See attached supplemental information sheet (Form 2A) for proposed well construction information.

In this area of Aurora County, the Dakota Aquifer lies on top of nearly impermeable Sioux Quartzite. In the Western part of Aurora County, the Dakota is found beneath 750 to 850 feet of overburden. The overburden is composed of topsoil and till to a depth of approximately 400 feet. Below the till, Pierre and Carlyle Shale are frequently encountered along with the Niobrara Chalk formation. Both of the shale formations are not generally capable of producing potable water. In this area, the Niobrara is also generally too thin to produce adequate quantities of water. Below these formations, a shallow layer of Greenhorn Limestone is frequently encountered. It lies just above the Dakota Aquifer. The two formations are frequently separated by a layer of Graneros Shale.

Because the Dakota Aquifer lies below the Greenhorn formation, no test hole log will be submitted with this application.



RECEIPT

414176

Division of Water Rights

South Dakota Department of Environment and Natural Resources

Pierre, _____ May 17, 19 94

RECEIVED OF Jim McPeak, 2116 Baihly Hills Dr SW, Rochester, MN 55902

the following amount in fees for services rendered as provided for by law:

Fee for Application for Permit No. <u>5825-3</u> to Appropriate Water, to construct and to put water to beneficial use _____	150	00
Fee for Application for Permit No. _____ to Appropriate Water, for Future Use _____		
Fee to retain Future Use Permit No. _____ after period of seven years.		
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. _____		
Fee for Filing Transfer Form _____		
Fee for Filing Extension Request _____		
Fee for _____		

(Any Other Work Provided by Law)	Total	150 00

By John Hatch
Chief Engineer



SECTION LINE

APPROXIMATE LOCATION OF WELL:

SITE = 2000' SOUTH AND 120'
EAST OF SECTION CORNER.

NORTHWEST 1/4 OF SECTION 31
TOWNSHIP 104 NORTH, RANGE 66 WEST

SCALE:
1" = 400'

SECTION LINE

1/4 LINE



APPROXIMATE LOCATION
OF WELL SITE



1/4 LINE

I HEREBY CERTIFY THAT THIS SURVEY, PLAN OR REPORT WAS
PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT
I AM A DULY REGISTERED ENGINEER UNDER THE LAWS OF THE
STATE OF SOUTH DAKOTA.


REGISTERED ENGINEER NUMBER 5477

schmucker-paul-nohr & associates
MITCHELL, SOUTH DAKOTA



SPN
ASSOCIATES

5825-3

Date: _____



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3181

January 15, 1993

JIM MCPEAK
PO BOX 759
2116 BAIHLY HILLS DRIVE
ROCHESTER MN 55903-0759

Re: 6.27.13 Great Plains Partnership
Animal Waste Management System P&S

Dear Mr. McPeak:

The Department of Environment and Natural Resources (DENR) is in receipt of three (3) copies of the plans and specifications (P&S) for your above referenced Animal Waste Management System (AWMS). The AWMS will be located in the Northwest 1/4 of Section 31, Township 104 North, Range 66 West in Aurora County, South Dakota.

This system consists of an aerobically designed lagoon for a 5,320-head gestation and farrow to finish swine confinement feeding operation.

The DENR has reviewed and hereby approves the P&S for the above mentioned project contingent upon the following comment(s) or qualification(s) listed below. This approval expires on January 15, 1995, unless construction has been started by that date. One copy of the approved P&S is being retained for our files.

1. Prior to construction of the AWMS, the Department would like to be notified to permit our personnel the opportunity for construction inspections. To notify us, please phone (605) 773-3351 and ask for Rodger Seefeldt.
2. The pipe connections from the barns to the manhole and for the irrigation equipment shall have watertight connections. The DENR would appreciate receiving from the owner or installer a detailed drawing of the irrigation pumping station, pump, and appurtenances (especially if the system is to be installed permanently) for review and inclusion in our file copy of the P&S.
3. A nutrient management plan (NMP) was submitted with the P&S for this site. The NMP will allow you to better plan your fertilizer use of the valuable nutrients contained in the solid and liquid wastes, and minimize or eliminate any potential surface and ground-water contamination.

4. Based on the system design, soil boring logs and other published reports and information, it is anticipated that if constructed as designed this system should not impact ground-water. Should the design or operation of the facility change appreciably, new hydrogeological information become available, or any contamination problems be reported, the DENR reserves the right to reassess the need for ground-water monitoring or any possible remedial action.

If any deviations are required from the approved plans, then those addenda and all change orders must be submitted for approval prior to construction. A complete set of as-built P&S will be required if several major deviations result.

The DENR recommends that an engineer or the Soil Conservation Service (SCS) be retained to oversee the construction of the AWMS to assure that the system will be constructed in accordance with the approved P&S. Upon completion of construction of the AWMS, the engineer or the SCS can complete the appropriate side of the attached Notice of Completion and return it to us. Upon receipt of this notice, we will send you a Certificate of Compliance.

If an engineer or the SCS is not retained to oversee the construction, then a copy of permeability and/or compaction tests shall be submitted to this Department for approval prior to putting the system into operation. To receive a Certificate of Compliance, an engineer or the SCS must be retained to oversee construction of and certify completion of the AWMS in accordance with approved P&S.

Our review is primarily to determine compliance with the minimum sanitary engineering requirements and does not cover items, such as, quality of material, structural soundness, workmanship, electrical and mechanical design features. Approval of the plans and specifications does not in any way release the applicant from the responsibility that the project will be an operable facility when construction is completed.

All local, city, and county governmental agencies should be contacted for their approval and/or comments prior to construction of the AWMS. If a stream, lake, or wetland is located in the construction site, then the Corps of Engineers (COE) and the Fish and Wild Life Service should be contacted for their approval and/or comments prior to construction of the AWMS.

If you have any questions, please let us know.

Sincerely,

Raymond F. Bircham, P.E.

Raymond F. Bircham, P.E.
Staff Engineer
Department of Environment and Natural Resources
Phone: (605) 773-3296

cc: Harlan Quenzer, Schmucker, Paul, Nohr, & Associates, Mitchell, SD

S137A.WQ



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3181

April 20, 1994

JIM MCPEAK
PO BOX 759
2116 BAIHLY HILLS DRIVE
ROCHESTER MN 55903-0759

Re: Great Plains Swine LLC Animal Waste Management System
Expansion Plans and Specifications (Site Number Two)

Dear Mr. McPeak:

The Department of Environment and Natural Resources (DENR) is in receipt of three (3) copies of the plans and specifications (P&S) for your Animal Waste Management System (AWMS). The AWMS will be located in the Southwest 1/4 of Section 31, Township 104 North, Range 66 West in Aurora County, South Dakota.

This system is for a 5,320-head/2,128-animal unit (A.U.) swine gestation and farrow to finish confinement feeding operation with 0 acres of drainage area. This system consists of piping, manhole, and an aerobically designed lagoon. The lagoon has been designed for 180 days of slurry storage.

The DENR has reviewed the project for storage and seepage requirements and hereby approves the P&S for the above mentioned project. This approval expires on April 20, 1996, unless construction has been started by that date. One copy of the approved P&S is being retained for our files.

If any deviations are required from the approved plans, then those changes and all change orders must be submitted for approval prior to construction. A complete set of as-built P&S will be required if several major deviations result.

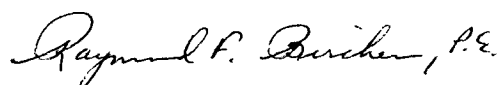
A list of requirements which you must implement and recommendations which you may wish to implement are listed on the attached page.

Jim McPeak
Page 2
April 20, 1994

Upon receipt of the enclosed Notice of Completion, a Certificate of Compliance is available for an AWMS when constructed as approved as long as this operation does not significantly change. Continued compliance is dependant upon proper operation and maintenance activities being performed by the owner/operator. This certificate does not relieve the owner/operator from any liabilities for noncompliance. Enclosed is an example of how a Certificate for your facility will look.

For more information on this review and approval please see the attached page of requirements and/or recommendations. If you have any questions regarding the content of this letter, please feel free to contact me. Thank you for your cooperation.

Sincerely,

A handwritten signature in cursive script that reads "Raymond F. Bircham, P.E.".

Raymond F. Bircham, P.E.
Staff Engineer
Department of Environment and Natural Resources
Phone: (605) 773-3296

cc: Harlan Quenzer, SPN, Mitchell, SD

Jim McPeak
Page 3
April 20, 1994

Requirements

This review is to determine whether seepage and storage requirements are being met, all other design considerations should be in accordance with the latest adopted SCS design criteria.

Recommendations

All local, city, and county governmental agencies should be contacted for their approval and/or comments prior to construction of the AWMS. If a stream, lake, or wetland is located in the construction site, then the Corps of Engineers (COE) and the Fish and Wild Life Service should be contacted for their approval and/or comments prior to construction of the AWMS.

Prior to the construction of the AWMS, the Department would like to be notified to permit our personnel the opportunity for construction inspections. To notify us, please phone (605) 773-3351 and ask for Rodger Seefeldt.

A nutrient management plan (NMP) was submitted with the P&S for this site. The NMP will allow you to better plan your fertilizer use of the valuable nutrients contained in the solid and liquid wastes, and minimize or eliminate any potential surface and/or ground-water contamination. The NMP indicates an excess amount of Phosphorus and Potassium would be applied to the existing available number of acres. The DENR recommends a buffer zone be established around any drainage in the application site(s) to minimize any potential surface water contamination from the application of the excess phosphorus and potassium. The DENR further recommends that the operation and maintenance (O&M) guideline and the NMP be strictly adhered to during application of the wastes. One final recommendation is that additional acreage be obtained for application of these excess nutrients.

Based on the system design, soil boring logs, and other published reports and information, it is anticipated that if constructed as designed this system should not impact ground-water. Should the design or operation of the facility change appreciably, new hydrogeological information become available, or any contamination problems be reported, the DENR reserves the right to reassess the need for ground-water monitoring or any possible remedial action.

Jim McPeak
Page 4
April 20, 1994

On plan sheet 4 of 10 the cross sectional views A-A and B-B show a proposed maximum water level at elevation 84.0 and a proposed maximum water level at elevation 73.0. The water level at elevation 73.0 should be corrected to read minimum water level instead of maximum water level.

On plan sheet 2 of 10, operation and maintenance note 1 indicates the top of the concrete chute will serve as a marker to indicate the maximum pond storage level (elevation 84.0 feet). Technically this is correct, however, the main reason for the marker is to indicate the elevation which will allow room for the 25-year 24-hour compliance storm in the pond (either in the form of runoff to the pond or rainfall on the pond surface) and still maintain the prescribed freeboard. According to the DENR's calculations, the marker should be set at elevation 83.5 to meet this criteria.

Plan sheet 5 of 10 indicates the concrete chute is designed to the maximum water level of 84.0. The purpose of the chute is to provide erosion protection to the pond dike from the discharge of wastewater from the inlet pipe. The DENR feels that the concrete chute is not necessary above the pipe unless there is some other inflow of wastes/water into the pond that is not shown. If the concrete chute is removed above the inlet pipe, then a post or some other marker device should be placed at the appropriate elevation.

Also the concrete chute should be anchored into the pond dike in some manner so as to keep the chute in place.

DENR POND SIZING CALCULATIONS

THIS WORKSHEET WILL CALCULATE THE USEABLE STORAGE VOLUME
OF AN ANIMAL WASTE HOLDING POND OR LAGOON GIVEN THE
BOTTOM DIMENSIONS AND THE SIDE SLOPES OF THE POND OR LAGOON

Great Plains Swine LLC Project (Expansion)

April 13, 1994

Lagoon

Calculations & Design Data

Volume required for wastes = 238,086 ft³; Volume required for
v.s. loading @ 2.0 # v.s./1,000 ft³/day = 1,496,430 ft³; Total
volume required = 1,496,430 ft³; Bottom elevation = 67.0; Bottom
= 324' x 324'; Top of dike elevation = 85.5; High water
elevation = 83.5; 25-year precipitation on pond = 0.5-ft;
Recommended freeboard = 1.5-ft; Design freeboard = 1.5-ft; ss =
3:1; Residual depth = 1.0-ft; Storage is between elevation 73.0
& 83.5;

FLOOR LENGTH		324.00		FLOOR WIDTH		324.00	
MAXIMUM DEPTH		16.50		USEABLE DEPTH		10.50	
RISE 1	1.00	RUN 1	3.00	RISE 2	1.00	RUN 2	3.00
RISE 3	1.00	RUN 3	3.00	RISE 4	1.00	RUN 4	3.00
1 & 2 ARE SLOPES FOR LENGTH				3 & 4 ARE SLOPES FOR WIDTH			
L. 6.0-FT. UP		360.00		W. 6.0-FT. UP		360.00	
L. @ MAX. EL.		423.00		W. @ MAX. EL.		423.00	
FLOOR AREA				104,976.00			
AREA 6.0 FOOT UP				129,600.00			
AREA @ MAXIMUM ELEVATION				178,929.00			
COMBINED AREA				613,089.00			
SUM OF 3 AREAS				921,618.00			
STORAGE VOLUME				1,612,831.50			

1,612,831.50 Ft³ > 1,496,430 Ft³ OK There is ample volume to
also contain the wastes produced which are 238,086 Ft³.

DENR 25-YEAR MARKER CORRECT ELEVATION DETERMINATIONS

THIS WORKSHEET WILL CALCULATE THE CORRECT ELEVATION FOR THE 25-YEAR MARKER FOR AN ANIMAL WASTE POND OR LAGOON GIVEN THE VOLUMES REQUIRED IN THE POND OR LAGOON, THE BOTTOM DIMENSIONS, AND THE SIDE SLOPES OF THE POND OR LAGOON

Great Plains Swine LLC Project (Expansion) April 13, 1994

Lagoon Marker

Calculations & Design Data

Volume required for wastes = 238,086 ft³; Volume required for v.s. loading @ 2.0 # v.s./1,000 ft³/day = 1,496,430 ft³; Total volume required below marker = 1,496,430 ft³; Total volume required above marker = 00,000 ft³; Bottom = 324' x 324'; Bottom elevation = 67.0; Top of dike elevation = 85.5; High water elevation = 83.5; Minimum recommended freeboard = 1.5-ft; Design freeboard = 1.5-ft; 25-year precipitation on pond = 0.5-ft; ss = 3:1; Try marker @ elevation = 83.5; Residual Depth = 6.0-ft;

FLOOR LENGTH		324.00		FLOOR WIDTH		324.00	
MARKER DEPTH		16.50		MARKER ELEV.		83.50	
MAXIMUM DEPTH		17.00		MAX. ELEVATION		84.00	
USE. DEPTH #1		10.50		USE. DEPTH #2		0.50	
RISE 1	1.00	RUN 1	3.00	RISE 2	1.00	RUN 2	3.00
RISE 3	1.00	RUN 3	3.00	RISE 4	1.00	RUN 4	3.00
1 & 2 ARE SLOPES FOR LENGTH				3 & 4 ARE SLOPES FOR WIDTH			
LENG. 6.0' UP		360.00		WIDT. 6.0' UP		360.00	
L. @ MARK. EL.		423.00		W. @ MARK. EL.		423.00	
L. @ MAX. EL.		426.00		W. @ MAX. EL.		426.00	
FLOOR AREA				104,976.00			
A. 6.0 FOOT UP		129,600.00		A. @ MARK. EL.		178,929.00	
A. @ MARK. EL.		178,929.00		A. @ MAX. EL.		181,476.00	
COMB. AREA		613,089.00		COMB. AREA		720,801.00	
SUM OF 3 AREAS		921,618.00		SUM OF 3 AREAS		1,081,206.00	
STOR. VOL. #1		1,612,831.50		STOR. VOL. #2		90,064.46	

1,612,831.50 ft³ > 1,496,430 ft³ OK for volume below marker.

90,064.46 ft³ > 00,000 ft³ OK for volume above marker.

Marker Elevation 83.50 is OK.

April 20, 1994

BOX 398 • MITCHELL, S. DAK. 57301 • PHONE (605) 996-7761 • FAX (605) 996-0015

Rodger Seefeldt
Division of Water Quality
Dept of Environment and Natural Resources
Foss Building
523 East Capitol
Pierre SD 57501

RE: Wastewater Treatment Facilities
Great Plains Swine, LLC
White Lake, South Dakota
SPN #94-6849



SCHMUCKER, PAUL, NOHR & ASSOCIATES

**ENGINEERS
SURVEYORS**

Dear Rodger:

Enclosed please find three (3) signed copies of the cover sheet for the plans for the above referenced project. Please replace the cover sheets on the plans that you already have.

If you have any questions please feel free to contact our office.

Sincerely,

SCHMUCKER, PAUL, NOHR & ASSOCIATES


Harlan J. Quenzer, P.E.

HJQ:ms

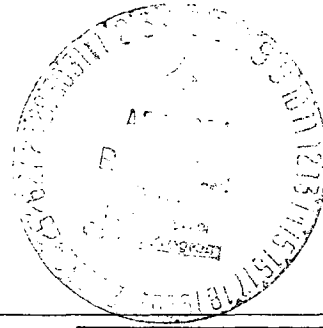
Enclosures

April 4, 1994

BOX 398 • MITCHELL, S. DAK. 57301 • PHONE (605) 996-7761 • FAX (605) 996-0015

Rodger Seefeldt
Division of Water Quality
Dept of Environment and Natural Resources
Foss Building
523 East Capitol
Pierre SD 57501

RE: Wastewater Treatment Facilities
Great Plains Swine, LLC
White Lake, South Dakota
SPN #94-6849



SCHMUCKER, PAUL, NOHR & ASSOCIATES

**ENGINEERS
SURVEYORS**

Dear Rodger:

Enclosed herewith for your review and approval are three (3) copies of the Design Report, plans and specifications for the above project. If you have any questions or comments, please call me. Your prompt review will be greatly appreciated inasmuch as the owner is very anxious to start construction on this project.

Sincerely,

SCHMUCKER, PAUL, NOHR & ASSOCIATES


Harlan J. Quenzer, P.E.

HJQ:rh

Enclosures

cc: Jim McPeak

April 4, 1994

BOX 398 • MITCHELL, S. DAK. 57301 • PHONE (605) 996-7761 • FAX (605) 996-0015

Rodger Seefeldt
Division of Water Quality
Dept of Environment and Natural Resources
Foss Building
523 East Capitol
Pierre SD 57501

RE: Wastewater Treatment Facilities
Great Plains Swine, LLC
White Lake, South Dakota
SPN #94-6849



SCHMUCKER, PAUL, NOHR & ASSOCIATES

**ENGINEERS
SURVEYORS**

Dear Rodger:

Enclosed herewith for your review and approval are three (3) copies of the Design Report, plans and specifications for the above project. If you have any questions or comments, please call me. Your prompt review will be greatly appreciated inasmuch as the owner is very anxious to start construction on this project.

Sincerely,

SCHMUCKER, PAUL, NOHR & ASSOCIATES

Harlan J. Quenzer, P.E.

HJQ:rh

Enclosures

cc: Jim McPeak

FILE



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3181

MEMO TO: Rodger Seefeldt, Point Source Control Program
Division of Environmental Regulation

FROM: Cris Skonard, Ground-Water Quality Program
Division of Environmental Regulation *CS*

DATE: April 7, 1994

SUBJECT: Great Plains Swine Management Partnership
Animal Waste Management System P&S

The waste treatment facility is located in the west 1/2 of Section 31, Township 104 North, Range 66 West in Aurora County, and is approximately 2 miles north, 4 miles west and 1/2 mile north of the City of White Lake, South Dakota. The waste treatment pond will cover approximately 4.1 acres and is designed to provide aerobic treatment of the waste from a year round swine feeding operation consisting of a total of 2,128 animal units. The proposed pond is a duplicate of an existing pond, see file memo dated January 15, 1993.

The Ground-Water Quality Program (GWQP) of the DENR has reviewed the Plans and Specifications (P&S) of the proposed animal waste management system (AWMS) to determine if ground-water monitoring will be required. At the present time, ground-water monitoring will not be required at this site.

Four soil borings were drilled at the proposed site (all four borings, SB#5, SB#6, SB#7 and SB#8, all of which were located between the existing pond and the proposed pond embankments). In general the soil profile is composed primarily of fat clay (CH), which should slow the vertical and horizontal movements of any possible contamination. No water was encountered in SB#8. Water was encountered in SB#5, SB#6 and SB#7, located outside of the pond area. The closest water bearing zone located in SB#5 is 3 feet below the proposed pond bottom. One domestic well is located two miles north of the site, is about 900 feet deep, and has a static water level about 75 feet below the land surface. The well log shows a relatively thick layer of till (160 feet), with the Pierre shale below the till extending to a depth of 420 feet. The top 40 feet of till is composed of yellow clay (weather clay), and the bottom 120 feet of till is unweathered clay (blue clay). Another two on-site domestic artesian wells (Well #'s 1 & 2) are located 1,020 and 980 feet, respectively, west and upgradient of the existing pond. They are 960 feet deep and neither well is currently used for domestic purposes. Domestic water is supplied by the Aurora-Brule Rural Water System.

Topographic maps, and geologic and water resources studies for the area indicate that the site does not overlie any shallow aquifers. A shallow glacial aquifer, the White Lake Aquifer, is located approximately 2-3 miles north and east of the proposed site. The nutrient management plan (NMP) shows that additional nitrogen may be required to meet crop needs, thus the field application of the manure should not cause the crop nitrogen requirements to be exceeded.

ITEMS TO BE INCLUDED ON THE P&S APPROVAL LETTER:

1) Based on the system design, soil boring logs and other published reports and information, it is anticipated that if constructed as designed, this system should not impact groundwater. Should the design or operation of the facility change appreciably, new hydrogeological information become available or any contamination problems be reported, the DENR reserves the right to reassess the need for groundwater monitoring or any possible remedial action.

cc. Jeanne Goodman
County File



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3181

M E M O R A N D U M

6 April 1994

TO : Tom Brandner, Ground-Water Quality Program
Division of Environmental Regulation

FROM : Rodger Seefeldt, Point Source Control Program *Rodger Seefeldt*
Division of Environmental Regulation

SUBJECT : Great Plains Swine LLC Expansion Project
Plans and Specifications (P&S)

The following is the legal description for the above mentioned feedlot which is located in Aurora County.

Northwest 1/4 of Section 31, Township 104 North, Range 66 West.

I would appreciate Ground-Waters comments for inclusion on the approval letter by 19 April 1994.

cc: Jeanne Goodman
Kelli Buscher

REPORT ON WATER PERMIT APPLICATION NO. 5825-3
for Great Plains Swine LLC
May 20, 1994

Application No. 5825-3 proposes to appropriate 75 gpm (0.17 cfs) from one well approximately 950 feet deep located in the SW 1/4 NW 1/4 of section 31, T104N R66W in Aurora County. The water is for commercial use in a swine production facility.

AQUIFER - DAKOTA FORMATION (DKOT)

The Dakota Formation consists of interbedded sandstone and shale and can attain a thickness of about 200 feet in this area (Hamilton, 1985). The aquifer underlies 719 square miles and contains an estimated 10.5 million acre feet of recoverable water in Aurora County (Hedges, 1982). The aquifer is confined and under artesian conditions at this site. The depth to the top of the Dakota Formation should be about 750 feet below land surface with a projected water level of about 65 feet below land surface.

The Division of Water Rights monitors an observation well AU-89A completed into the Dakota Formation and is located about 15 miles southeast of this application. Water levels for this well do not fluctuate very much. This well has declined about 1.5 feet since records have been kept starting in June of 1989 (Water Rights, 1994). The water level record indicates that the aquifer is capable of sustaining additional withdrawals. Other water level information is presented in the Hamilton report and the Schoon report (Schoon, 1971). The water levels in the Dakota Formation have declined as much 150 feet in this area (Schoon, 1971). Hamilton reports declines but that the rate of decline has slowed considerably in the last 20 to 30 years. This appears to be the case and is well documented by the observation well record for AU-89A.

REVIEW OF EXISTING WATER PERMITS/RIGHTS

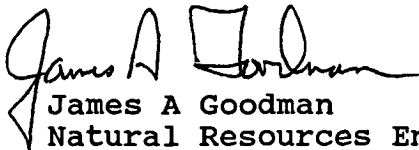
There is one existing water permit located about 4 miles south of this application which obtains water from the Dakota Formation. Interference is not expected to be a concern. Drawdown will be created by pumping but this should not significantly impact existing users in the area. The Dakota Formation is used for domestic purposes in this area. The application indicates that there is an existing domestic well about 100 feet from this application.

CONCLUSIONS

1. Water is available from the Dakota Formation.
2. Interference is not expected to be a concern.
3. Recharge to the Dakota Formation has not been quantified. The water level record indicates decline for the Dakota Formation.

The rate of decline has slowed considerably over the years and is now about 0.3 feet per year (at observation well site).

4. The major reason for declining water levels in the Dakota Formation is the large number of uncontrolled flowing wells and improperly built or abandoned wells which allow water to flow to waste.
5. The well authorized by this application must be constructed in accordance with SD Well Construction Standards. Standard 74:02:04:28 is the applicable construction standard. This well must be grouted from the top of the formation to the land surface in order to comply with the standards. "Slim Hole" construction is not allowed.
6. This is an existing facility which is being expanded. Plans and Specifications have already been reviewed and approved by the Point Source Control Program.


James A Goodman
Natural Resources Engineer

BIBLIOGRAPHY

- Hamilton, L.J., 1985, Water Resources of Aurora and Jerauld Counties, South Dakota, WRI 84-4030, USGS, Huron, SD, 57350.
- Hedges, L.S., et al, 1982, Evaluation of Ground-Water Resources Eastern SD and Upper Big Sioux River, SD and Iowa, for US Army Corps of Engineers, SD DENR, SDGS, Vermillion, SD, 57069.
- Schoon, R.A., 1971, Geology and Hydrology of the Dakota Formation in South Dakota, RI No. 104, SD DENR, SDGS, Vermillion, SD, 57069.
- Water Rights, 1994, Unpublished Observation Well Data for the Dakota Formation, SD DENR, Division of Water Rights, Pierre, SD, 57501.

RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 5825-3, Great Plains Swine, LLC

Pursuant to SDCL 46-2A-2, the following is the recommendation of the Chief Engineer, Water Rights Division, Department of Environment and Natural Resources concerning Water Permit Application No. 5825-3, Great Plains Swine, LLC, c/o Jim McPeak, PO Box 1027, Rochester, MN 55902.

The Chief Engineer is recommending APPROVAL of Application No. 5825-3 because 1) there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) the proposed diversion can be developed without unlawful impairment of existing rights, 3) the proposed use is a beneficial use and 4) in the public interest with the following qualifications:

1. The well authorized by Permit No. 5825-3 shall be constructed by a licensed well driller and construction shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) from the producing formation to the surface pursuant to Section 74:02:04:28.
2. Operation of the disposal systems to dispose of waste and wastewater shall be in a manner that prevents runoff from the disposal sites and from entering the waters of the State. The diffused drainage of natural precipitation on agricultural land resulting from a "non-point source" is not subject to these conditions.
3. The wastewater storage lagoon shall be designed so that it does not receive surface runoff from the surrounding area.
4. No wastewater may be released from the wastewater lagoon except through the disposal system, unless an extended period of above normal precipitation results in excess stored water and prevents operation of equipment to lower water levels due to field and weather conditions.
5. Design, construction and management of the lagoons shall be sufficient to maintain a seepage rate of less than 1/16 of an inch per day. Compaction of the soils in the bottom of the wastewater lagoon must be at least ninety-five percent of the Standard Procter Density (ASTM D6980-70).
6. The well approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.

7. Approval of Permit No. 5825-3 is subject to compliance with the following then existing and applicable Water Management Board rules:

- a. Chapter 74:03:15 Ground Water Quality Standards,
- b. Chapter 74:03:16 Ground Water Discharge Permit,
- c. Chapter 74:03:02 Surface Water Quality Standards,
- d. Chapter 74:03:04 Uses Assigned to Streams, and
- e. Chapters 74:03:17 through 74:03:26 Surface Water Discharge Provisions

See report on application for additional information.

A handwritten signature in cursive script, appearing to read "John Hatch", is written above the typed name.

JOHN HATCH, Chief Engineer
May 20, 1994



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3181

**NOTE: TO BE SURE OF PUBLICATION ON
THE CORRECT DATES, CONTACT
THE NEWSPAPER RIGHT AWAY.**

May 20, 1994

Jim McPeak
Great Plains Swine LLC
PO Box 1027
Rochester, MN 55903

Dear Mr. McPeak:

Water Permit Application No. 5825-3 for commercial use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice of hearing has been sent to the Publisher of the South Dakota Mail printed at Plankinton, SD (Ph # 942-7770). A copy of the recommendation of the Chief Engineer and a report on the application will be sent to you next week. Please review the notice prior to publication and notify this office, if you have any corrections or questions.

Be sure to contact the above newspaper to authorize publication of your Notice of Hearing and to arrange for payment. Early contact with the paper can eliminate delays. The publisher has been instructed to publish your notice once each week for two consecutive weeks with the last publication to occur twenty days before the board meeting. The newspaper has been instructed to send us the Proof of Publication. We must receive Proof of Publication before action can be taken on the application.

Sincerely,

Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3181

May 25, 1994

Jim McPeak
Great Plains Swine LLC
PO Box 1027
Rochester, MN 55903

Dear Mr. McPeak:

On May 20, 1994, a cover letter with a notice of hearing was sent to you on Water Permit Application No. 5825-3. Enclosed is a copy of the recommendation of the Chief Engineer and a report on that application.

If you have any questions, please contact Eric Gronlund at (605)773-3352.

Sincerely,

A handwritten signature in cursive script that reads "Jaci R. Konop".

Jaci R. Konop
Senior Secretary
Water Rights Division

enclosures

NOTE: If you plan to contest any part of the Chief Engineer's recommendation, you must file a petition pursuant to the procedures outlined in the notice of hearing that was sent to you. The Water Management Board will then consider your concerns during a hearing on the application.



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3181

May 20, 1994

South Dakota Mail
Box 367
Plankinton, SD 57368-0367

ATTENTION: Legal Department

Enclosed is a Notice of Hearing on Application No. 5825-3 to be published twice. Please publish the first notice on May 26, 1994, with the second publication 7 days later.

The APPLICANT MUST VERIFY TO YOU THAT THE NOTICE IS TO BE PUBLISHED, before you make the first publication. Please BILL the APPLICANT for the cost of publication. The APPLICANT is Great Plains Swine LLC, PO Box 1027, Rochester, MN 55903 (Ph # 507-288-3312).

A copy of BOTH publications must be SENT to the WATER RIGHTS DIVISION. IMMEDIATELY return the FIRST publication with the FIRST Transmittal form on the bottom of this page. The first copy is needed to check the publication for errors so any corrections can be made in the second publication. Publication errors can invalidate the public notice and cause the applicant costly delays.

Please be sure the SECOND publication is returned IMMEDIATELY with the enclosed Proof of Publication form. DO NOT WAIT until the end of the month or the billing cycle. No action may be taken on the permit application until proof of publication has been received.

Sincerely,

Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures

-----CUT HERE-----

FIRST TRANSMITTAL NOTICE

TO: Eric Gronlund
Water Rights Division
Joe Foss Building
Pierre SD 57501-3181

No. _____

Date _____

We are in receipt of your letter of _____ enclosing Notice of
Hearing to Appropriate Water by Application No. _____ which was first
published in our issue of _____. ENCLOSED IS A COPY OF THIS
FIRST PUBLICATION.

Name

Newspaper

Instruction to Newspaper - Publish first Notice on May 26, 1994, with the second publication 7 days later. The applicant is responsible for payment.

NOTICE OF HEARING on Application No. 5825-3 to Appropriate Water

Notice is given that Great Plains Swine LLC, PO Box 1027, Rochester, MN 55903 has filed an application for a water permit to appropriate 75 gallons per minute (0.17 cubic feet of water per second) from one well (Dakota Formation) approximately 950 feet deep located in the SW 1/4 NW 1/4 Section 31-T104N-R66W. The water is for commercial use in a swine production facility.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 5825-3 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest.

Any person interested in opposing or supporting this application must file a written petition with BOTH the applicant and Chief Engineer. The applicant must also file a petition if opposed to the Chief Engineer's recommendation. The Chief Engineer's address is "Water Rights Division, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by June 17, 1994. The petition may be informal, but must include a statement describing the petitioner's interest in the application, the petitioner's reasons for opposing or supporting the application, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained.

The Water Management Board will consider this application at 10:00 a.m., June 29, 1994, Lake Francis Room, Ramkota Inn Best Western, 920 West Sioux, Pierre, SD. The Chief Engineer's recommendation is not final or binding upon the Board. The Board is authorized to 1) approve, 2) approve with qualifications, 3) defer, or 4) deny this application based on the facts presented at the public hearing. The June 29, 1994, hearing date will be automatically delayed for at least 20 days upon written request to the Chief Engineer from the applicant or any interested person opposing the application. The request for an automatic delay must be filed by June 17, 1994.

Any hearing will be an adversary proceeding. Any person filing a petition and/or the applicant have the right to be represented by a lawyer and may present evidence or cross-examine witnesses according to SDCL 1-26. These and other due process rights will be forfeited if not exercised. Decisions of the Board may be appealed to the Circuit Court and State Supreme Court as provided by law. Contact Eric Gronlund by June 17, 1994, at the above Water Rights Division address to request copies of information pertaining to this application, to assure access to the hearing by the handicapped or to obtain an interpreter for the hearing impaired.

This application is made pursuant to SDCL 46-1-1 thru 46-1-9, 46-1-12 thru 46-1-16; 46-2-3.1, 46-2-9, 46-2-11, 46-2-13, 46-2-17; 46-2A-1 thru 46-2A-10, 46-2A-12, 46-2A-14, 46-2A-15, 46-2A-20, 46-2A-21; 46-5-1 thru 46-5-11, 46-5-13 thru 46-5-15, 46-5-24, 46-5-25, 46-5-30.2, 46-5-30.4, 46-5-31; 46-6-3, 46-6-3.1, 46-6-6.1, 46-6-10, 46-6-13, 46-6-14, 46-6-26; and Board Rules ARSD 74:02:01:01 thru 74:02:01:15. Russell L. Stone, Acting Secretary, Department of Environment and Natural Resources.

PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA)

County of Aurora) ssI, Edward Van Henderen

certify that the attached printed Notice was

taken from the South Dakota
Mailprinted and published in BlackintonCounty of Aurora and State ofSouth Dakota. The notice was published in
the newspaper on the following two dates:May 26, 1994
June 2, 1994Cost of Printing: \$56.37Edward Van Henderen
(Signature)Bookkeeper
(Title)June 2, 1994
(Date Signed)**NOTICE OF HEARING****on Application****No. 5825-3 to****Appropriate Water**

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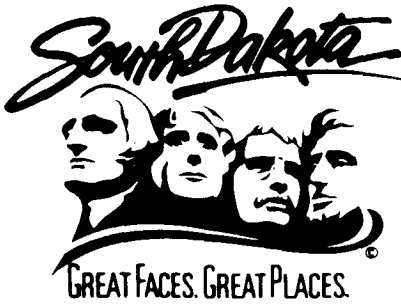
Any hearing will be an adversary proceeding. Any person filing a petition and/or the applicant have the right to be represented by a lawyer and may present evidence or cross-examine witnesses according to SDCL 1-26. These and other due process rights will be forfeited if not exercised. Decisions of the Board may be appealed to the Circuit Court and State Supreme Court as provided by law. Contact Eric Gronlund by June 17, 1994, at the above Water Rights Division address to request copies of information pertaining to this application, to assure access to the hearing by the handicapped or to obtain an interpreter for the hearing impaired.

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Russell L. Stone,
Acting Secretary,
Department of Environment
and Natural Resources

2tc.J-2





**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3181

NOV 14 1994

Jim McPeak
Great Plains Swine LLC
PO Box 1027
Rochester, MN 55903

Dear Mr. McPeak:

Enclosed is Water Permit No. 5825-3 authorizing construction of your water diversion system and beneficial use of the water, not exceeding the limits as specified in the Water Permit.

Also enclosed is Form 10, Notice of Completion of Works and Application of Water to Beneficial Use, which you are to complete and submit to the Chief Engineer when you have completed the system and/or have put the water to beneficial use. An inspection can then be scheduled so that the Water License may be issued, thus completing your acquisition of a Water Right.

Very truly yours,

JOHN HATCH, Chief Engineer
Water Rights Division
605 773-3352

enclosures

PLEASE NOTE: Certain changes can be made in your permit within the five year construction period, usually without affecting the priority date provided an application to amend your permit is made within the five year period - i.e. changes in location or number of diversion points (wells) or location of land to be irrigated. Well locations for wells into the same aquifer can be moved up to 660 feet without application.

Applications to amend a permit after the five year construction period will be assigned a new priority date. Applications to change water sources, to add lands or increase original diversion rates, if approved will usually receive the date of the new application as a priority date regardless of the five year construction period.



NOTICE OF COMPLETION OF WORKS AND APPLICATION OF WATER TO BENEFICIAL USE

Date July 12, 1995

TO: Water Rights Division, DENR
523 E. Capitol
Pierre, SD 57501-3181

FROM: GREAT PLAINS SWINE, L.L.C. Box 1027
(name) (address)

ROCHESTER MN 55903 605-249-2630 or
(city) (state) (zip) (phone)
507 288 3312

I have completed the construction of the water diversion system and I have put the water to beneficial use to the maximum extent it is going to be used. I have not exceeded the amounts specified in Water Permit No. 5825-3.

Water Permit No. 5825-3 states that the diversion system is to be constructed by or before Dec 28 1996, and that the water is put to beneficial use by or before

June 28 1999.
(date)

The diversion system was completed on 6-20-95.
(date)

Applying the water to beneficial use was completed on 6-20-95.
(date)

You may schedule an inspection so that the Water License may be issued.

Jim McPeak
(signature)



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3181

September 20, 1996

5825-3

Jim McPeak
Great Plains Swine, L.L.C.
Box 1027
Rochester, MN 55903

Dear Mr. McPeak:

The inspection of your water use system and the inspection of the extent of application of water to beneficial use, as developed under Water Permit No. 5825-3, has been completed. Your final water right document, the Water License, can now be issued.

Statutes require that we charge a \$50.00 fee for the inspection and issuance of the Water License. Upon receipt of the \$50.00 fee from you, we will begin processing your Water License.

**Please remit fee to:
Department of Environment & Natural Resources
Water Rights Program
523 E. Capitol
Pierre, SD 57501-3181**

Sincerely,

Cheryl F. Frost
Secretary
Water Rights Program
(605) 773-3352

NOTE: On check or money order, please specify your permit number. This will insure proper handling of the fee.

RECEIPT

415121

Division of Water Rights

South Dakota Department of Environment and Natural Resources

Pierre, _____ September 26, 19 96

RECEIVED OF Great Plains Swine, L.L.C., P.O. Box 1027, Rochester, MN 55903

the following amount in fees for services rendered as provided for by law:

Fee for Application for Permit No. _____ to Appropriate Water, to construct and to put water to beneficial use _____		
Fee for Application for Permit No. _____ to Appropriate Water, for Future Use _____		
Fee to retain Future Use Permit No. _____ after period of seven years.		
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. <u>5825-3</u>	50	00
Fee for Filing Transfer Form _____		
Fee for Filing Extension Request _____		
Fee for _____		

(Any Other Work Provided by Law)	Total	50 00

By John Hatup
Chief Engineer

Permit No. 5825-3
Missouri River - Water District

Report Of Examination Of Works And/Or Application of Water To Beneficial Use

TO: Chief Engineer, Water Rights Program, DENR, Foss Bldg., Pierre, SD 57501

I have this day, **March 18, 1996**, made a thorough examination of the water use system constructed by **Great Plains Swine, L.L.C., Box 1027, Rochester, MN 55903** holder of Permit No. **5825-3**, bearing the priority of **May 17, 1994** authorizing the diversion of **0.17** cu. ft. of water per second from **ground water** for **commercial** purposes, in **Aurora** County.

I have to report on the conditions of the same as follows:

A. Works used to divert the water:

A 5 HP Franklin motor with a 75 GPM Grundfos pump.

B. Works used to transport water to place of use:

2" pipeline throughout the hog facility.

C. Works used to apply water to beneficial use:

N/A

The system is in the following condition **good**. The point of diversion is located **600 feet E and 2240 feet S from the NW corner of Section 31; T104N R66W (SW1/4 NW1/4)**. The works are capable of diverting and conveying to the place of use **0.17** cu. ft. of water per second which is to be used for **commercial** use and the license should be issued for **0.17** cfs.

Applicable permit qualifications have been complied with: Yes ☒ No

Exceptions to compliance are: **none** Date Report Completed: **September 20, 1996**



Barry A. McLaury
Natural Resources Scientist
DENR, Water Rights Program

NOTE:

The permit holder purchases water from the Aurora - Brule Rural Water System.

REPORT ON INSPECTION OF PERMIT NO. 5825-3

Other permit(s) associated with the project: None

DATE OF INSPECTION: March 18, 1996

NAME OF INSPECTION CONTACT: Mark Tol, mgr.

NAME & ADDRESS OF PERMIT HOLDER: Great Plains Swine, L.L.C., Box 1027, Rochester, MN 55903

DIVERSION POINT LEGAL LOCATION: 600 feet E and 2240 feet S from the NW corner of Section 31; T104N R66W (SW1/4 NW1/4).

WELL INFORMATION:

- 1) Well Drilling Firm: Hutmacher Drilling, Inc.
- 2) No. of Wells 1

- 3) Depth(s) 870 feet
- 4) Well log is available Y

Casing:

- 1) Diameter 3 inches
- 2) Length 470 feet
- 3) Type pvc

Casing:

- 1) Diameter 5 inches
- 2) Length 400 feet
- 3) Type pvc

Screen:

- 1) Type pvc
- 2) Length 30 feet
- 3) Static water level 75 feet

Motor:

- 1) Make Franklin
- 2) Model No. submersible
- 3) Horsepower rating 5 HP

Pump:

- 1) Make grundfos
- 2) Model No. submersible
- 3) Capacity 75 GPM

SYSTEM TYPE:

Commercial use for a hog operation.

949 JAG

PERMIT QUALIFICATIONS AND REGULATIONS:

- 1) Special qualifications to permit being abided by Y
- 2) All structures, wells and lands on map Y
- 3) Irrigation Questionnaires checked to determine if permit owner started irrigation by the end of construction period N/A

COMMENTS:

The permit holder also uses water from the Aurora - Brule Rural Water System.

NOT TO SCALE



Barry A. McLaury
Environmental Scientist
Water Rights Program
Date September 29, 1996

5825-3

STATE OF SOUTH DAKOTA

WATER LICENSE NO. 5825-3

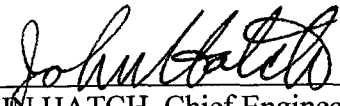
(1) Great Plains Swine, L.L.C., PO Box 1027, Rochester MN 55903 made Application No. 5825-3, May 17, 1984 for a water permit to divert 0.17 cubic feet of water per second from groundwater (one well), Aurora County, South Dakota for commercial use purposes. Permit No. 5825-3, with a priority date of May 17, 1994 was approved June 28, 1994 and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before June 28, 1999 and for the application to beneficial use of said water on or before June 28, 2003.

The permit holder submitted a *Notice of Completion of Works and Application of Water to Beneficial Use* on July 14, 1995. The *Notice* stated the diversion system was completed on June 20, 1995 and the water placed to beneficial use on June 20, 1995.

(2) It is certified that the applicant has complied with the provisions of South Dakota State Law relating to completion of the construction of the water supply system and is entitled to divert 0.17 cubic feet of water per second for beneficial use. The location of the diversion point is 600 feet east and 2,240 feet south from the northwest corner of Section 31-T104N-R66W (SW 1/4 NW 1/4).

(3) The applicant has complied with the provisions of South Dakota State Law relating to the application of water to beneficial use in a swine production facility.

(4) Pursuant to South Dakota Water Law 46-5-30.1 Great Plains Swine, L.L.C., PO Box 1027, Rochester MN 55903 the holder and/or owner of Water Permit No. 5825-3 is issued a license to appropriate water, the right to use 0.17 cubic feet of water per second from groundwater (one well) with a priority date of May 17, 1994 from the location specified in (2) of this license, for the purpose of commercial use. This license is subject to any limitations or qualifications listed in Water Permit No. 5825-3 and subject to South Dakota State Law.


JOHN HATCH, Chief Engineer
Water Rights Program
Department of Environment and Natural Resources

OCT 17 1996

date





**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3181

OCT 17 1996

5825-3

Jim McPeak
Great Plains Swine, L.L.C.
P.O. Box 1027
Rochester, MN 55903

Dear Mr. McPeak:

Enclosed is Water License No. 5825-3. This is the final water right document completing your process of obtaining a Water Right. Enclosed is Receipt No. 415121 in the amount of \$50.00 which you paid for the investigation and issuance of the Water License.

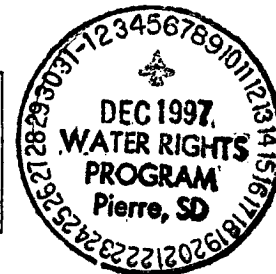
For your information SDCL 46-6-27 requires that if the owner of an existing well, such as the well authorized by Water Right No. 5825-3, constructs a replacement well and does not plan to use the old well, the old well is considered abandoned and must be plugged. Also, any well that is being used or is not considered abandoned must be valved and controlled, if flowing, or sealed and capped so that no leaking occurs either underground or at the surface.

As long as you use the water beneficially, as stated in the Water License, the State Water Laws provide that you have a continuing right to use the water. If you have any questions, please contact our office.

Very truly yours,

JOHN HATCH, Chief Engineer
Water Rights Program
(605) 773-3352

ks
enclosures



Mail to:
Water Rights Division
Joe Foss Building
523 E Capitol
Pierre SD 57501-3181
605 773-3352

No. _____ Hydrologic Unit _____
Basin _____
Newspaper _____
(office use only)

Application For Permit To Appropriate Water Within The State Of South Dakota

Check use of water:

☐ Municipal ☐ Suburban Housing ☐ Recreational ☐ Institutional
☐ Rural Water System ☐ Commercial ☐ Fish & Wildlife ☐ Geothermal Heat
☒ Domestic ☐ Industrial ☐ Other _____
(over 18 gpm)

Type of Application: ☐ New ☐ Vested Right (Use predates Mar 2, 1955) ☐ Future Use Reservation
(check one) ☐ Place to Beneficial Use Water Reserved by Future Use Permit No. _____
☒ Amendment/Correction to Permit No. 5825-3

Description of amendment/correction: (i.e. change diversion point(s), add diversion point(s), change use, etc.)
ADD DIVERSION POINT

- Name of Applicant GREAT PLAINS SWINE LLC Phone (507) 288-3312
Mailing Address PO BOX 1027 ROCHESTER State MN 55903
(Street, RR, or Box) (City) (Zip Code)
- Amount of water claimed _____ *CFS or 75 **GPM _____ ***AF
(*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use if applicable
- Source of water supply DAKOTA AQUIFER
- Location of point of diversion (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W) WELL IN THE SW 1/4 OF THE NW 1/4 OF SECTION 31, T 104 N, R 66 W OF THE 5TH P.M.
- County AURORA
- County or counties where water will be used AURORA
- Annual period during which water is to be used JANUARY 1 TO DECEMBER 31
- Give a description of the project. When available include any preliminary engineering report or other reports or information that will help explain the project. (Attach sheet if more space is needed)

The new well is to be used only in case of a failure of the main well and will be used as a backup for watering livestock. In the event of a failure of the first well, the proposed back up will result in no additional water taken over the current permit of 75 gallons per minute. The back up well will be constructed the same as the main well on file.

Attachments: Attach Form 2A if diversion is from a well or dugout, or if storage of water is proposed. Attach map and any other technical information. (see instructions)

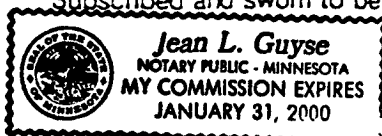
STATE OF SOUTH DAKOTA)

County of DARLSON)^{ss}

I, Jim McPeak, the applicant, certify that I have read this application, have examined the attached map and that the matters stated are true and that I intend, and am able to complete the necessary construction.

Signed Jim McPeak

Subscribed and sworn to before me this 3rd day of December 1997



Jean L. Guyse
Notary Public



SECTION LINE

SECTION LINE

New Well

South Well

NORTHWEST 1/4 OF SECTION 31
TOWNSHIP 104 NORTH, RANGE 66 WEST

SCALE:
1" = 400'

1/4 LINE

APPROXIMATE LOCATION
OF WELL SITE

1/4 LINE

DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
WATER RIGHTS PROGRAM

December 10, 1997

RE: Request for an additional point of diversion for Water Right No. 5825-3, Great Plains Swine LLC

Great Plains Swine LLC has submitted an application requesting authorization for an additional point of diversion for Water Right No. 5825-3. SDCL 46-5-13.1 provides that a point of diversion may be changed or additional points of diversion may be approved without application or publication of a notice of hearing if the additional point of diversion is from the same source of water, no additional water is appropriated and the chief engineer makes a finding that the change does not increase the potential for interference with existing diversions.

Water Right No. 5825-3 appropriates 0.17 cubic feet of water per second from one Dakota Formation well located in the SW1/4 NW1/4 Section 31, T104N, R66W. Right No. 5825-3 was approved June 28, 1994 and a licensing investigation conducted by Barry McLaury on March 18, 1996. The additional diversion point is to be used as a back-up well only in case of a failure of the main well authorized by Water Right No. 5825-3.

The application requests an additional diversion point located in the SW1/4 NW1/4 Section 31, T104N, R66W. The proposed well is to be constructed into the Dakota Formation. The application states that the additional well will be constructed the same as the main well.

The application for Water Right No. 5825-3 indicates the nearest domestic well on applicant's property is approximately 100 feet away and the nearest domestic well on property owned by others is more than 1/2 mile. As part of the review of this request for an additional diversion point, a review of well construction reports on file with the Water Rights Program was conducted. The nearest well was found to be approximately 2 miles north of the proposed additional diversion point.

The original report prepared for Water Right No. 5825-3 found the closest existing water permit (No. 5117-3) utilizing the Dakota Formation is located approximately four miles south of the facility. The report concluded that well interference is not expected to be a concern.

This additional diversion point is to be used as a back-up water supply. No additional appropriation of water is authorized by this request. The additional well must be constructed in accordance with SD Well Construction Standards. Standard 74:02:04:28 is the applicable construction standard. The additional well must be grouted from the top of the formation to the land surface in order to comply with the standards. "Slim Hole" construction is not allowed for this type of use.



Eric Gronlund
Natural Resources Engineer
Water Rights Program

The Chief Engineer makes a finding that the additional diversion point does not increase the potential for interference with existing diversions. In making the finding, "does not increase the potential for interference" is interpreted to mean potential for adverse interference. An additional point of diversion for Water Right No. 5825-3 may be constructed without requiring application or publication of a notice of hearing pursuant to SDCL 46-2A-4. A new water right permit is necessary for any diversions greater than 0.17 cfs at the facility.

A handwritten signature in cursive script, appearing to read "John Hatch".

John Hatch, Chief Engineer
Water Rights Program

12-15-97



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3181

December 18, 1997

Jim McPeak
Great Plains Swine LLC
P.O. Box 1027
Rochester, MN 55903

Dear Mr. McPeak:

I am writing in regard to Great Plains Swine's request for one additional diversion point (Dakota Formation well) for Water Right No. 5825-3. Water Right No. 5825-2 appropriates 0.17 cubic feet of water per second (cfs) [75 gallons per minute] from the Dakota Formation for a commercial use in a swine production facility.

Great Plains Swine has requested an additional well to be located in the SW1/4 NW1/4 Section 31, T104N, R66W. The additional well is to be used as a back-up well only in case of a failure of the main well authorized by Water Right No. 5825-3. The request is not for any additional appropriation of water.

Upon review of the request and pursuant to SDCL 46-5-13.1, Great Plains Swine is authorized to develop the addition diversion point (well) without application or publication of a notice of hearing pursuant to SDCL 46-2A-4. A new water right permit is necessary for any diversion greater than 0.17 cfs at the facility.

The additional well must be constructed in accordance with SD Well Construction Standards. Standard 74:02:04:28 is the applicable construction standard. The additional well must be grouted from the top of the formation to the land surface in order to comply with the standards. "Slim Hole" construction is not allowed for this type of use of water. If you have any questions on well construction, please contact Jim Goodman at (605) 773-3352.

Very truly yours,

John Hatch, Chief Engineer
Water Rights Program
(605) 773-3352